

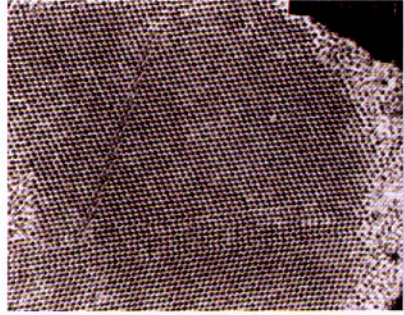
A microscopic image of cervical cells. The cells are stained, showing various shades of blue, purple, and red. Some cells exhibit abnormal morphology, including enlarged nuclei and irregular shapes, which are characteristic of HPV infection. The background is a light, grainy texture.

Get to Know about
Human Papilloma Virus (HPV)

*How does It Relate to
cervical cancer?*

What is Human Papilloma Virus (HPV)?

HPV is a very common virus and there are more than 70 types identified. The infection is usually self containing, as our body immune system can usually clear the HPV in one to two years time after infection. Different types of HPV can cause different diseases and we categorize HPV as high risk and low risk types, according to their relation with cervical cancer.



How does one get infected with HPV?

Some types of the HPV are transmitted through intimate sexual contact. It was shown in overseas studies that up to 70% of all sexually active women have been infected by HPV sometimes in their lives. Therefore, being infected by HPV alone is not considered as suffering from a sexually transmitted disease. In case you are found to be infected, it would be difficult to trace the time and from whom you have contracted the infection. For couples who have sexual activities, both partners would have already been infected. Up till now, we have no effective means to prevent the transmission of this very common infection.

What diseases will be caused by low risk HPV?

Some 20 types of HPV are categorized as low risk HPV as they will not lead to cervical cancer. These HPV types can cause warts in different parts of the body, such as hands and sexual organs like the cervix, vagina or vulva. These warts may be so small that they can only be found under a magnifying glass (photo in right side), or they may resemble cauliflower and are big enough to be seen by visual inspection. These are not predecessors of cancer and will usually disappear gradually in a couple of years.



However, most doctors will recommend excision of big warts to improve appearance and soothe the symptoms.

How is high risk HPV related to cervical cancer?

High risk types of HPV are now known to be the cause of most cases of cervical cancer. They invade the cells in the cervix, resulting in abnormal cell changes (photo in front cover) and may lead to cervical cancer. **Fortunately, this rarely occurs and most of the infected woman will not develop cervical cancer.** Moreover, even if it occurs, it is a very slow process and in the worst type of cellular changes, it may still take 5 to 10 years before further deterioration to cancer.

Since HPV infection is so common, I may have been infected. What type of treatment is recommended?

People get infected will not develop symptoms like fever or malaise. Specific treatment is not necessary because the infection is usually cleared by our immune system. Medical or surgical treatment is not necessary unless there is visible wart.

How can I know if I have been infected by high risk HPV?

Previously we would detect the presence of the virus through identification of special changes in the cervical cells either in the cervical smear or during colposcopic examination. With advances in medical technology, we can now perform molecular biology test to detect the presence of high risk HPV when ASC-US is identified in your cervical smear test.

Test to detect High Risk HPV can help the doctor to apprehend the disease condition more accurately and unnecessary follow up investigations like repeat cervical test and colposcopic examination can then be avoided.

What is ASC-US?

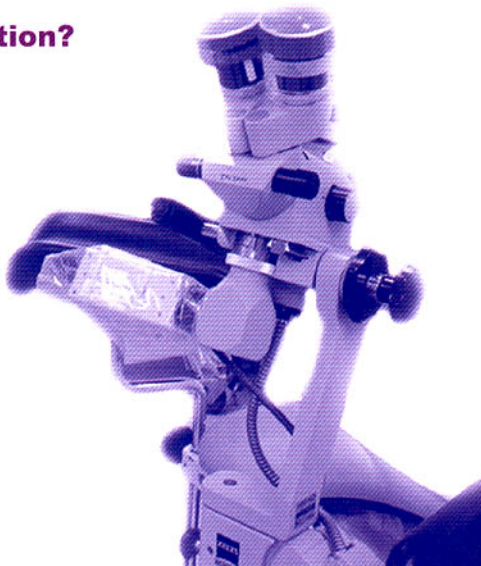
ASC-US stands for **A**typical **S**quamous **C**ells of **U**ndetermined **S**ignificance. This means that there are only very minor changes in the cervical cells under microscopic examination and there is no pre-cancerous cells. Generally speaking, repeat cervical smear is necessary.

What to do if my cervical smear test shows ASC-US and high risk HPV infection?

You don't need to worry much because your health will definitely not be endangered in the coming months by the mildly deteriorated cells and the virus. We will refer you for a colposcopic examination performed by a specialist.

What is colposcopic examination?

You may conceptualise the colposcope as a sophisticated magnifying glass for examination of the cervix (photo in right side). A speculum will be inserted by a doctor, just like taking a smear. Different solutions will be applied on the cervix to highlight abnormal regions. The abnormal part will be removed for laboratory test. The whole procedure takes around 10 to 20 minutes. Further management will be directed by the examination finding and the test result.



What should I do if my cervical smear test shows ASC-US without high risk HPV infection?

Although deteriorating cells are detected, your health will not be endangered and your chance of developing cervical cancer is low. Generally speaking, you will have repeated cervical cell test a year later.

Having regular cervical screening test can help to detect abnormal cell changes in an early phase for proper treatment and thereby prevent cervical cancer.

Apart from having regular cervical smear test, what else can I do to avoid getting cervical cancer?

Don't smoke! Smoking is associated with progression of cellular abnormality and cancers in the cervix. Moreover, you can reduce the risk of infection by having sex only with one partner who has sex only with you. Condoms used correctly may reduce the possibility of contracting viral infection in new sexual contacts.

Cervical smear service is available at:

- Maternal & Child Health Centres of the Department of Health
24 Hours Booking Hotline: 3166-6631
- Lady Helen Woo Women's Diagnostic & Treatment Centre
Tel: 2589-2405
Address: 2/F East Wing, Tsan Yuk Hospital, 30 Hospital Road, Sai Ying Pun, Hong Kong
- Other Service Providers: www.cervicalscreening.gov.hk

Photos of cervical cell changes and Human Papilloma Virus under electronic microscope are provided by courtesy of Dr. Annie Cheung, Pathology Department, University of Hong Kong.



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